| Notice of Allowability | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/685,313 | BURRELL, BRANDON MITCHELL | |
| | Examiner | Art Unit | |
| | Peter J. Smith | 2176 | |

***-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--***

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *12/19/2005*.

2. ☒ The allowed claim(s) is/are *1-39*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

## DETAILED ACTION

1. This action is responsive to communications: RCE amendment filed on 12/19/2005.

2. Claims 1-39 are pending in the case. Claims 1, 14, and 27 are independent claims.

## EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin Ransom on 3/15/2006.

The application has been amended as follows:

1. (Currently Amended by Examiner) A computer-readable medium having stored therein a data structure in the form of a language module for storing data strings used by a display management module to display information on a display terminal, wherein said data structure comprises a string data area stored in a range of memory addresses in the computer-readable medium, wherein said string data area includes a plurality of data strings to be displayed by the display management module, wherein each character of each data string is a character selected from the group consisting of standard ASCII, extended ASCII, and double byte characters, wherein said characters are stored in said string data area based on an escape code having a value selected such that all of the standard ASCII, extended ASCII, and double byte

characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased, and wherein characters in a data string that are standard ASCII and extended ASCII characters having ASCII codes less than a selected escape code are stored by their ASCII representations in said string data area, while extended ASCII characters and standard ASCII characters, if any, having ASCII codes at least as great as the selected escape code and ASCII characters that identify double byte characters are encoded as two-byte codes and the encoded values are stored in said string data area.

14. (Currently Amended by Examiner) A method for creating a data structure in a computer-readable medium in the form of a language module for storing data strings used by a display management module to display information on a display terminal, wherein said method comprises the steps of:

creating a string data area in a range of memory addresses in the computer-readable medium for storing each of the data strings;

determining the number of standard ASCII, extended ASCII, and double byte characters to be stored in the string data area;

selecting a value of an escape code such that all of the standard ASCII, extended ASCII, and double byte characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased;

analyzing each character of each data string, wherein each character is a character selected from the group consisting of standard ASCII, extended ASCII, and double byte characters;

encoding extended ASCII characters and standard ASCII characters, if any, having ASCII values at least as great as a selected escape code and ASCII characters that identify double byte characters with two-byte encoded values;

storing each data string in the string data area, wherein for each data string said storing step stores standard ASCII characters and extended ASCII characters having ASCII codes less than the selected escape code by their ASCII representations and stores extended ASCII characters and standard ASCII characters, if any, having ASCII values greater than or equal to the selected escape code and ASCII characters that identify double byte characters by their encoded values as determined in said encoding step.

27. (Currently Amended by Examiner) A computer program product for creating a data structure in the form of a language module for storing data strings used by a display management module to display information on a display terminal, wherein the computer program product comprises:

a computer-readable storage medium having computer readable program code means embodied in said medium, said computer-readable program code means comprising:

first computer instruction means for creating a string data area in a range of memory addresses in the computer-readable medium for storing each of the data strings;

second computer instruction means for determining a value of an escape code that has been selected such that all of the standard ASCII, extended ASCII, and double byte characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased;

third computer instruction means for analyzing each character of each data string, wherein each character is a character selected from the group consisting of standard ASCII, extended ASCII, and double byte characters;

fourth computer instruction means for encoding extended ASCII characters and standard ASCII characters, if any, having ASCII values at least as great as the selected escape code and ASCII characters that identify double byte characters with two-byte encoded values;

fifth computer instruction means for storing each data string in the string data area, wherein for each data string said fourth computer instruction means stores standard ASCII characters and extended ASCII characters having ASCII codes less than the selected escape code by their ASCII representations and stores extended ASCII characters and standard ASCII, if any, having ASCII values at least as great as the selected escape code and ASCII characters double byte characters by their encoded values as determined in said third computer instruction means.

## REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance: The claimed invention defines features not found in the prior art by the Examiner. The claimed invention defines data strings of characters, wherein each character of the data string is a character selected from the group consisting of standard ASCII, extended ASCII, and double byte characters. The data string employs a dynamically selected escape code not found in the prior art by the Examiner. The invention, as defined in independent claim 1, requires an escape code having a value selected such that all of the standard ASCII, extended ASCII, and double byte characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased. The invention, as defined in independent claim 14, requires selecting a value of an escape code such that all of the standard ASCII, extended ASCII, and double byte characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased. The invention, as defined in independent claim 27, requires determining a value of an escape code that has been selected such that all of the standard ASCII, extended ASCII, and double byte characters can be properly stored in the string data area, wherein by lowering or raising the value of the escape code, the number of unique double byte characters that may be encoded in the data strings can be increased or decreased. This dynamic feature of encoding a variable number of double byte characters, defined in each of the independent claims, is not taught by Merkin, Lim, Wei, or any other of the prior art found by the Examiner.

Furthermore, the invention, as defined by independent claim 1, also requires that the extended ASCII characters and standard ASCII characters, if any, having ASCII codes at least as great as the selected escape code and ASCII characters that identify double byte characters are encoded as two-byte codes. The invention, as defined by independent claim 14, also requires encoding extended ASCII characters and standard ASCII characters, if any, having ASCII values at least as great as a selected escape code and ASCII characters that identify double byte characters with two-byte encoded values. The invention, as defined by independent claim 27, also requires encoding extended ASCII characters and standard ASCII characters, if any, having ASCII values at least as great as the selected escape code and ASCII characters that identify double byte characters with two-byte encoded values. This feature of encoding certain extended ASCII, standard ASCII, and all of the double byte characters as two-byte codes is not taught by Merkin, Lim, or Wei, and has not been found in the prior art by the Examiner. Therefore, for at least these reasons, the Examiner believes the combination of limitations in the claimed invention is both novel and not obvious over all found prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
3/15/2006

DOUG HUTTON
PRIMARY EXAMINER
TECH CENTER 2100